



January 23, 2017

Madeline Keller
ADEQ-Environmental Program Specialist
Water Quality Division
Water Quality Enforcement Unit
1110 W. Washington St.
Phoenix, AZ 85007

Re: Canyon Mine Non-Storm water Impoundment 3.04 General Aquifer Protection Permit No. P-100333 Annual Report for 2016

Dear Ms. Keller:

Enclosed please find Energy Fuels Resources (USA) Inc.'s ("EFRI's") 2016 Annual Report for the Canyon Mine (the "Mine") in accordance with the Mine's Non-storm water Impoundment 3.04 General Aquifer Protection Permit (the "APP") No. P-100333.

Pursuant to the requirements found in the APP and in the Arizona Administrative Code (A.A.C.) R18-9-D304, EFRI agreed to the following voluntary condition:

"2. Mine Shaft Sump Monitoring

i. EFRI agrees to measure the daily volume of water pumped from the underground mining areas, and conduct periodic sampling for the water pumped from the underground mining areas as follows:

EFRI will sample water pumped from the underground mining areas at the point the water discharges to the non-storm water impoundment on a quarterly basis for the parameters set forth in Table 1 of the permit. If there is no water pumped during a particular quarter, then no sample will be required. EFRI will report to the Arizona Department of Environmental Quality ("ADEQ") the results of the daily volume of water pumped and quarterly sampling within 30 days of the end of each of the first two quarters of operation, and on an annual basis thereafter.

ii. If the sampling results suggest that aquifer water quality standards could be exceeded in groundwater beneath the mine given the depth to groundwater at the mine, EFRI will increase the frequency of pumping to mitigate any risk to groundwater."

EFRI began discharging to non-storm water impoundment in July of 2013. In accordance with the APP condition 2.i, EFRI submitted quarterly reports to ADEQ on October 23, 2013 and January 13, 2014. The January 13, 2014 report documented the second quarter of pumping operations, and the second of two required quarterly reports; and therefore, reporting is now

required at an annual frequency. On November 4, 2013, EFRI placed the Mine on standby status. There was no water discharged to the non-storm water impoundment in 2014, and therefore no samples were collected as noted in the 2014 Annual Report submitted to ADEQ on January 13, 2015. EFRI recommenced shaft sinking and dewatering activities at the Mine in October of 2015. A sample was collected in 2015 and was reported in the Annual Report for 2015 and submitted to ADEQ on January 20, 2016. Shaft sinking continued in 2016 and quarterly samples were collected.

As of the end of the fourth quarter 2016, the shaft has been sunk to a depth of approximately 1400 feet. Mine development and mining will not commence until the shaft reaches a depth of approximately 1600 feet. The shaft is located to the side of the ore body and as a result, has not and will not penetrate the ore body. At the time the sump levels are reached, EFRI will be able to survey and perform Klinkenberg testing on the mine sumps required by Section 1.ii of the APP. As the pumped water has entered the shaft well above the ore body, the analytical results presented to date can be considered to represent background groundwater quality at that depth.

Per Section 2.i of the APP, the attached Table 1 includes the daily volume of water pumped from underground mining areas for 2016. All water pumped from underground mining areas in to the non-storm water impoundment was discharged in accordance with the approved storm water Pollution Prevention Plan ("SWPPP"). Monthly SWPPP inspections are conducted to ensure all discharge procedures and best management practices ("BMPs") are in compliance. A summary of the monthly inspections and BMPs are described in the annual SWPPP report. The attached Table 2 includes a summary of the analytical results for the quarterly water samples, collected when the mine is pumping water into the non-storm water impoundment. The samples are taken from the outfall point where mine water discharges from underground into the non-storm water impoundment. The complete data packages are provided as Attachment 1.

Please feel free to contact me at 303-389-4134 if you have any questions or concerns.

Sincerely,

ENERGY FUELS RESOURCES (USA) INC.

Kathy Weinel

Quality Assurance Manager

cc: Scott Bakken, Ty Fisher and David Turk (EFRI)

Vimal Chauhan (ADEQ)

TABLES

TABLE 1

Canyon Mine Daily Volume of Water Pumped from Underground Mining Areas during 2016

Date	Reading	(GA/D)	Date	Reading	(GA/D)	Date	Flow Meter Reading	(GA/D)
				First Quarter 2016	9			
	January 2016			February 2016			March 2016	
1/1/2016	322624	0	2/1/2016	373576	1,920	3/1/2016	No Water Pumped	0
1/2/2016	324337	1,713	2/2/2016	375786	2,210	3/2/2016	426117	1,646
1/3/2016	326476	2,139	2/3/2016	378894	3,108	3/3/2016	427314	1,197
1/4/2016	328112	1,636	2/4/2016	380227	1,333	3/4/2016	428762	1,448
1/5/2016	329867	1,755	2/5/2016	382283	2,056	3/5/2016	430020	1,258
1/6/2016	331014	1,147	2/6/2016	383976	1,693	3/6/2016	431475	1,455
1/7/2016	332091	1,077	2/7/2016	385817	1,841	3/7/2016	432216	741
1/8/2016	334612	2,521	2/8/2016	386112	295	3/8/2016	433195	626
1/9/2016	335274	662	2/9/2016	387720	1,608	3/9/2016	434211	1,016
1/10/2016	337428	2,154	2/10/2016	388671	951	3/10/2016	435003	792
1/11/2016	339081	1,653	2/11/2016	389871	1,200	3/11/2016	436155	1,152
1/12/2016	342107	3,026	2/12/2016	392997	3,126	3/12/2016	437472	1,317
1/13/2016	344318	2,211	2/13/2016	395100	2,103	3/13/2016	439127	1,655
1/14/2016	No water pumped	0	2/14/2016	396799	1,699	3/14/2016	440828	1,701
1/15/2016	344704	386	2/15/2016	398499	1,700	3/15/2016	442182	1,354
1/16/2016	345688	984	2/16/2016	400041	1,542	3/16/2016	444773	2,591
1/17/2016	345889	201	2/17/2016	401843	1,802	3/17/2016	446344	1,571
1/18/2016	346093	204	2/18/2016	403109	1,266	3/18/2016	448627	2,283
1/19/2016	347607	1,514	2/19/2016	404729	1,620	3/19/2016	450224	1,597
1/20/2016	348995	1,388	2/20/2016	406760	2,031	3/20/2016	451989	1,765
1/21/2016	350092	1,097	2/21/2016	408217	1,457	3/21/2016	453602	1,613
1/22/2016	351558	1,466	2/22/2016	410460	2,243	3/22/2016	455169	1,567
1/23/2016	353064	1,506	2/23/2016	412317	1,857	3/23/2016	456361	1,192
1/24/2016	355227	2,163	2/24/2016	414998	2,681	3/24/2016	457509	1,148
1/25/2016	357871	2,644	2/25/2016	417072	2,074	3/25/2016	458623	1,114
1/26/2016	359374	1,503	2/26/2016	419116	2,044	3/26/2016	460083	1,460
1/27/2016	361932	2,558	2/27/2016	421339	2,223	3/27/2016	462897	2,814
1/28/2016	363414	1,482	2/28/2016	422968	1,629	3/28/2016	465145	2,248
1/29/2016	365112	1,698	2/29/2016	424471	1,503	3/29/2016	467471	2,326
1/30/2016	368008	2,896				3/30/2016	469937	2,466
1/31/2016	371656	3,648	Total Gallons Pumped for February	sped for February	52,815	3/31/2016	471532	1,595
al Gallons Pur	Total Gallons Pumped for January	49,032				Total Gallons Pumped for March	nped for March	47,061

Table 1

	FIOW INTEREST	Town Towns						
Date	Reading	(GA/D)	Date	Reading	(GA/D)	Date	Reading	(GA/D)
8 1985			Se	Second Quarter 2016				
	April 2016			May 2016			June 2016	
4/1/2016	473256	1,724	5/1/2016	515614	1,049	6/1/2016	203203	1850
4/2/2016	475,140	1,884	5/2/2016	516689	1,075	6/2/2016	564834	1,632
4/3/2016	476587	1,447	5/3/2016	517616	927	6/3/2016	566167	1,333
4/4/2016	477919	1,332	5/4/2016	520086	2,470	6/4/2016	567495	1,328
4/5/2016	479199	1,280	5/5/2016	523971	3,885	6/5/2016	568772	1,277
4/6/2016	481024	1,825	5/6/2016	524892	921	6/6/2016	570046	1,274
4/7/2016	482122	1,098	5/7/2016	525711	819	6/7/2016	571388	1,342
4/8/2016	483028	906	5/8/2016	526238	527	6/8/2016	572471	1,083
4/9/2016	484971	1,943	5/9/2016	526644	406	6/9/2016	574085	1,614
4/10/2016	486278	1,307	5/10/2016	527162	518	6/10/2016	576002	1,917
4/11/2016	488095	1,817	5/11/2016	527908	746	6/11/2016	577571	1,569
4/12/2016	488622	527	5/12/2016	529654	1,746	6/12/2016	579189	1,618
4/13/2016	490496	1,874	5/13/2016	531519	1,865	6/13/2016	580835	1,646
4/14/2016	492087	1,591	5/14/2016	533201	1,682	6/14/2016	581782	947
4/15/2016	492868	781	5/15/2016	534929	1,728	6/15/2016	583206	1,424
4/16/2016	494287	1,419	5/16/2016	239985	1,758	6/16/2016	585969	2,763
4/17/2016	495734	1,447	5/17/2016	538481	1,794	6/17/2016	588224	2,255
4/18/2016	497046	1,312	5/18/2016	539775	1,294	6/18/2016	589813	1,589
4/19/2016	497681	635	5/19/2016	544110	4,335	6/19/2016	592052	2,239
4/20/2016	499822	2,141	5/20/2016	546397	2,287	6/20/2016	593466	1,414
4/21/2016	501067	1,245	5/21/2016	548113	1,716	6/21/2016	594551	1,085
4/22/2016	502853	1,786	5/22/2016	549562	1,449	6/22/2016	292862	1,314
4/23/2016	504611	1,758	5/23/2016	550824	1,262	6/23/2016	598561	2,696
4/24/2016	206809	2,198	5/24/2016	552166	1,342	6/24/2016	600490	1,929
4/25/2016	508005	1,196	5/25/2016	665855	1,433	6/25/2016	601887	1,397
4/26/2016	209899	1,894	5/26/2016	554834	1,235	6/26/2016	603450	1,563
4/27/2016	511049	1,150	5/27/2016	556195	1,361	6/27/2016	604510	1,060
4/28/2016	512215	1,166	5/28/2016	557404	1,209	6/28/2016	605779	1,269
4/29/2016	513192	226	5/29/2016	269855	1,293	6/29/2016	607043	1,264
4/30/2016	514565	1,373	5/30/2016	160095	1,394	6/30/2016	608291	1,248
			5/31/2016	561352	1,261			
al Gallons Pur	Total Gallons Pumped for April	43,033	Total Gallons Pumped for May	ed for May	46,787	Total Gallons Pumped for June	nped for June	45,089
								The second secon

Table 1 Canyon Mine Daily Volume of Water Pumped from Underground Mining Areas During 2016

				1		0		
å	Flow Meter	Gallons Pumped	-	Flow Meter	Gallons Pumped			Gallons Pumped
Date	Keading	(GA/D)	Date	Keading	(GA/D)	Date	Flow Meter Keading	(GAVD)
				Third Quarter 2016	2016	No. of Contract of		
	July 2016			August 2016			September 2016	
7/1/2016	610062	1,771	8/1/2016	662012	2,091	9/1/2016	No Water Pumped	0
7/2/2016	611893	1,831	8/2/2016	663734	1,722	9/2/2016	701040	1,659
7/3/2016	613724	1,831	8/3/2016	665262	1,528	9/3/2016	718226	17,186
7/4/2016	615026	1,302	8/4/2016	666122	098	9/4/2016	719968	1,742
7/5/2016	617134	2,108	8/5/2016	667501	1,379	9/5/2016	721764	1,796
7/6/2016	618399	1,265	8/6/2016	668278	777	9/6/2016	723408	1,644
7/7/2016	620035	1,636	8/7/2016	No Water Pumped	0	9/7/2016	724899	1,491
7/8/2016	621505	1,470	8/8/2016	No Water Pumped	0	9/8/2016	727832	2,933
7/9/2016	623188	1,683	8/9/2016	670370	2,092	9/9/2016	730114	2,282
7/10/2016	624826	1,638	8/10/2016	671486	1,116	9/10/2016	732628	2,514
7/11/2016	624916	06	8/11/2016	672591	1,105	9/11/2016	735293	2,665
7/12/2016	625044	128	8/12/2016	673747	1,156	9/12/2016	736010	717
7/13/2016	626228	1,184	8/13/2016	060529	1,343	9/13/2016	738187	2,177
7/14/2016	627171	943	8/14/2016	62889	1,799	9/14/2016	740624	2,437
7/15/2016	629819	2,648	8/15/2016	678412	1,523	9/15/2016	No Water Pumped	0
7/16/2016	631979	2,160	8/16/2016	No Water Pumped	0	9/16/2016	No Water Pumped	0
7/17/2016	634198	2,219	8/17/2016	679314	905	9/17/2016	743135	2,511
7/18/2016	636001	1,803	8/18/2016	680299	985	9/18/2016	744823	1,688
7/19/2016	637238	1,237	8/19/2016	681353	1,054	9/19/2016	746011	1,188
7/20/2016	639700	2,462	8/20/2016	682218	865	9/20/2016	747598	1,587
7/21/2016	641362	1,662	8/21/2016	683242	1,024	9/21/2016	748622	1,024
7/22/2016	642026	664	8/22/2016	684525	1,283	9/22/2016	749910	1,288
7/23/2016	643618	1,592	8/23/2016	685712	1,187	9/23/2016	No Water Pumped	0
7/24/2016	645279	1,661	8/24/2016	687330	1,618	9/24/2016	No Water Pumped	0
7/25/2016	646947	1,668	8/25/2016	689971	2,641	9/25/2016	750802	892
7/26/2016	648551	1,604	8/26/2016	691120	1,149	9/26/2016	752175	1,373
7/27/2016	651722	3,171	8/27/2016	692877	1,757	9/27/2016	754514	2,339
7/28/2016	653485	1,763	8/28/2016	693467	290	9/28/2016	756561	2,047
7/29/2016	655292	1,807	8/29/2016	695892	2,425	9/29/2016	758763	2,202
7/30/2016	657008	1,716	8/30/2016	697640	1,748	9/30/2016	760904	2,141
7/31/2016	659921	2,913	8/31/2016	699381	1,741			
Total Gallons Pumped for July	imped for July	51,630	Total Gallons Pi	Total Gallons Pumped for August	39,460	Total Gallons Pu	Total Gallons Pumped for September	61,523
						Total for the Quarter	arter	152,613

Canyon Mine Daily Volume of Water Pumped from Underground Mining Areas During 2016 Table 1

		Gallons			Callons			Callons
	Flow Meter	Pumped		Flow Meter	Pumped		Flow Meter	Pumped
Date	Reading	(GA/D)	Date	Reading	(GA/D)	Date	Reading	(GA/D)
				Fourth Quarter 20	2016			
	October 2016			November 2016		(December 2016	
10/1/2016	763163	2,259	11/1/2016	818943	1,819	12/1/2016	1213300	19,034
10/2/2016	765352	2,189	11/2/2016	821641	2,698	12/2/2016	1227880	14,580
10/3/2016	767114	1,762	11/3/2016	832917	11,276	12/3/2016	1236041	8,161
10/4/2016	769596	2,482	11/4/2016	848361	15,444	12/4/2016	1249720	13,679
10/5/2016	772766	3,170	11/5/2016	864225	15,864	12/5/2016	1260159	10,439
10/6/2016	774049	1,283	11/6/2016	879972	15,747	12/6/2016	1280079	19,920
10/7/2016	776992	2,943	11/7/2016	890024	10,052	12/7/2016	1303027	22,948
10/8/2016	778041	1,049	11/8/2016	904843	14,819	12/8/2016	1321006	17,979
10/9/2016	779665	1,624	11/9/2016	918991	14,148	12/9/2016	1337536	16,530
10/10/2016	781782	2,117	11/10/2016	944301	25,310	12/10/2016	1357396	19,860
10/11/2016	782844	1,062	11/11/2016	962884	18,583	12/11/2016	1375609	18,213
10/12/2016	784869	2,025	11/12/2016	987553	24,669	12/12/2016	1394823	19,214
10/13/2016	786692	1,823	11/13/2016	No Water Pumped	0	12/13/2016	1412149	17,326
10/14/2016	788605	1,913	11/14/2016	988361	808	12/14/2016	1429711	17,562
10/15/2016	790567	1,962	11/15/2016	988935	574	12/15/2016	1446629	16,918
10/16/2016	792465	1,898	11/16/2016	992332	3,397	12/16/2016	1467072	20,443
10/17/2016	794363	1,898	11/17/2016	1018500	26,168	12/17/2016	1485543	18,471
10/18/2016	796262	1,899	11/18/2016	1037420	18,920	12/18/2016	1501886	16,343
10/19/2016	797192	930	11/19/2016	1060730	23,310	12/19/2016	1517442	15,556
10/20/2016	799009	1,817	11/20/2016	1078770	18,040	12/20/2016	1539245	21,803
10/21/2016	802132	3,123	11/21/2016	1099080	20,310	12/21/2016	1548372	9,127
10/22/2016	803819	1,687	11/22/2016	1120020	20,940	12/22/2016	1564025	15,653
10/23/2016	805741	1,922	11/23/2016	1138790	18,770	12/23/2016	No Water Pumped	0
10/24/2016	806588	847	11/24/2016	No Water Pumped	0	12/24/2016	No Water Pumped	0
10/25/2016	808370	1,782	11/25/2016	1147210	8,420	12/25/2016	No Water Pumped	0
10/26/2016	809379	1,009	11/26/2016	1155360	8,150	12/26/2016	No Water Pumped	0
10/27/2016	810209	830	11/27/2016	1166660	11,300	12/27/2016	No Water Pumped	0
10/28/2016	812066	1,857	11/28/2016	1172490	5,830	12/28/2016	1721549	157,524
10/29/2016	813502	1,436	11/29/2016	1183700	11,210	12/29/2016	1746540	24,991
10/30/2016	814991	1,489	11/30/2016	1194266	10,566	12/30/2016	No Water Pumped	0
10/31/2016	817124	2,133				12/31/2016	No Water Pumped	0
Fotal Gallons Pumped for	ımped for							
October	October 1	56,220	Total Gallons Pu	tal Gallons Pumped for November	377,142	Total Gallons Pu	Total Gallons Pumped for December	552,274
						Total for the Quarter	arter	985,636
						Total for the Year		25 300

TABLE 2

Canyon Mine Non-Stormwater Impoundment Sample Summary

Analytes Metals - Total unless	Units	Discharge 3/8/2016	Discharge 6/28/2016	Discharge 9/26/2016	Discharge 11/9/2016
indicated					
Antimony	mg/L	0.0045	0.0053	0.0057	0.0056
Arsenic	mg/L	0.0074	0.0063	0.0052	0.292
Barium	mg/L	0.052	0.036	0.039	0.223
Beryllium	mg/L	<0.00005	<0.00005	0.00007	0.00012
Cadmium	mg/L	0.0002	0.0001	0.0001	0.0008
Chromium	mg/L	<0.01	<0.01	<0.01	0.01
Copper	mg/L	<0.01	<0.01	<0.01	0.026
Iron	mg/L	0.4	0.04	0.07	1.13
Lead	mg/L	0.0016	0.0002	0.0006	0.017
Manganese	mg/L	0.015	0.006	< 0.005	0.022
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Nickel	mg/L	0.063	0.057	0.51	0.297
Selenium	mg/L	0.0047	0.004	0.0038	0.001
Thallium	mg/L	0.0018	0.0018	0.0017	0.0012
Uranium (dissolved)	mg/L	0.01	0.0056	0.0046	0.13
Vanadium	mg/L	<0.005	< 0.005	<0.005	< 0.005
Zinc	mg/L	0.31	0.17	0.17	0.33
Radionuclides - Dissolved				La Caraciana Caraciana	
Gross Alpha		12 (±5.1)	4.9 (±3.1)	5.4 (±3.31)	130 (±13)
Radium 226	pCi/L	2.6 (± 0.21)	1.8 (± 0.17)	1.7 (± 0.32)	24 (± 0.67)
Radium 228	pCi/L	0.14 (± 0.44)	0.23 (± 0.77)	0.48 (± 0.9)	0.94 (± 0.7)
Uranium 234	pCi/L	2.1 (± 2.1)	2.3 (± 1.3)	1.4 (± 1.4)	4.1 (± 1.9)
Uranium 235	pCi/L	0.11 (± 0.66)	-0.11 (± 0.49)	-0.95 (± 0.96)	0.0 (± 0.71)
Uranium 238	pCi/L	3.04 (± 2.2)	2.73 (± 1.42)	0.1 (± 1.3)	4.35 (± 2)
Major Ions					
Alkalinity (Total)	mg/L	231	193	182	207
Calcium	mg/L	67.9	63.3	61.7	69.9
Fluoride	mg/L	0.2	0.15	0.15	0.22
Magnesium	mg/L	41.3	39.3	37.9	38.7
Potassium	mg/L	1.8	1.5	1.6	3.1
Sodium	mg/L	21.8	19.3	18.4	10.1
Sulfate	mg/L	112	103	119	106
Physical Properties					
Conductivity	umhos/cm	699	650 (f = 651)	656 (f = 655)	683
pH (field)	S.U.	033	7.48	6.56	003
TDS	mg/L	430	396	396	398
: - Indicates that the analyte				330	330

< - Indicates that the analyte was not dectected above the reporting limit.

^{() -} Indicates the error term for the radiological result.